

## Claims

- [1] A method for obtaining traffic information of a highway using billing information of a mobile terminal by extracting unique information of the terminal from call data when the terminal entering the highway attempts a telephone call, tracking a moving path and time between base stations and producing an average speed per hour, the method comprising the steps of:
- (a) when sample objects enters a section, parallel to a local road, containing a base station providing a communication service to an area of a tollgate, increasing the number of sample objects to a predetermined multiple of the reference number of objects;
  - (b) tracking moving paths and moving time periods of the sample objects extracted at the step (a) between the base stations and producing an average speed per hour between the base stations;
  - (c) when a speed difference in an area of the base station providing the communication service to the area of the tollgate is reduced by a predetermined speed or more, removing a corresponding sample object; and
  - (d) maintaining the number of sample objects as the reference number of objects, in an area of a base station out of the area of the tollgate in the section parallel to the local road.
- [2] The method as set forth in claim 1, wherein the predetermined multiple at the step (a) is two.
- [3] The method as set forth in claim 1, wherein at least one new sample object before the section parallel to the local road is extracted and the number of sample objects is increased at the step (a).
- [4] The method as set forth in claim 1, wherein the speed difference reduced by a predetermined speed or more at the step (c) is 10 %.
- [5] The method as set forth in claim 1, wherein the corresponding sample object is removed from the number of sample objects increased to the predetermined multiple if the number of sample objects is larger than the reference number of objects when the number of sample objects is maintained as the reference number of objects at the step (d).
- [6] The method as set forth in claim 5, wherein the removed sample object is listed, and is first extracted when the number of sample objects is insufficient.
- [7] The method as set forth in claim 1, wherein at least one sample object is

extracted from objects driven on the highway if the number of sample objects is smaller than the reference number of objects when the number of sample objects is maintained as the reference number of objects at the step (d).

- [8] The method as set forth in claim 7, wherein the objects driven on the highway are extracted from objects with which a setup operation in a different base station installed on the local road before the section parallel to the local road is not carried out the predetermined number of times.